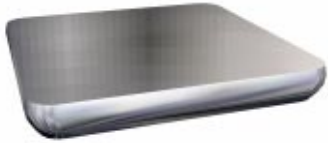# Components Of Successful Software Development

Software Solutions

Mobi-Sys *Internet Solutions Inc.*

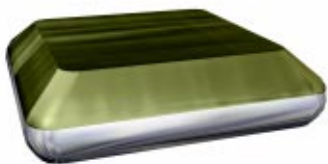Software Development Solutions and Consulting

Component 1: The Right People

Meet Mobi-Sys Internet Solutions

Mobi-Sys is a software development and consulting company located in Vancouver, British Columbia, Canada. We specialize in the creation of elegant business solutions, derived through a structured, analytical approach, and constructed in an efficient manner. We take the opportunity to build quality into each stage of development to minimize risk and ensure the system's success. We have learned to exercise patience, diligence and creativity to deliver services and products we can be proud of.
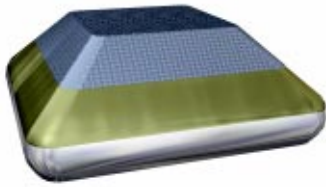
Our team members and corporate partners have diverse backgrounds in the development of business solutions. We use this variety of experience and skill distribution to increase the overall level of service that we provide and because we are not a corporate recruiting agency, our clients enjoy the benefit of working with a team that has extensive experience, synergy and cohesion. We also have the benefit of being part of the Microsoft Developers Network, which gives us the advantage of having access to the latest technologies and the best methods to employ them.

Component 2: The Solid Commitment

Our Strength: Commitment to Maintaining Client Trust and Satisfaction

It is our belief that better service and successful solutions deployment can only occur through solid commitment in all areas. This requires commitment between our team members and a) each other, b) the methodologies we practise, c) the projects we undertake, d) the changing technologies that we adapt to, and e) above all, the clients who trust us with their business. How a client's needs are satisfied during and beyond a project's completion makes or breaks a client's trust. Our track record of long-term relationships and partnerships we enjoy with our clients serves as the best proof to the link between commitment and success.

Component 3: The Structured Approach

Our Primary Focus: The Client's Business Solution

Technology is ever changing. Ensuring that the project's vision is well defined, and that the defined software solution satisfies our client's business objectives is our first priority. This comes with a clear understanding of the client's workflow and needs, the development of creative ideas, and the ability to validate the behaviour of the software solution before a single line of code is written. To achieve these ends we draw upon our experience in the implementation of formal software development methodologies.
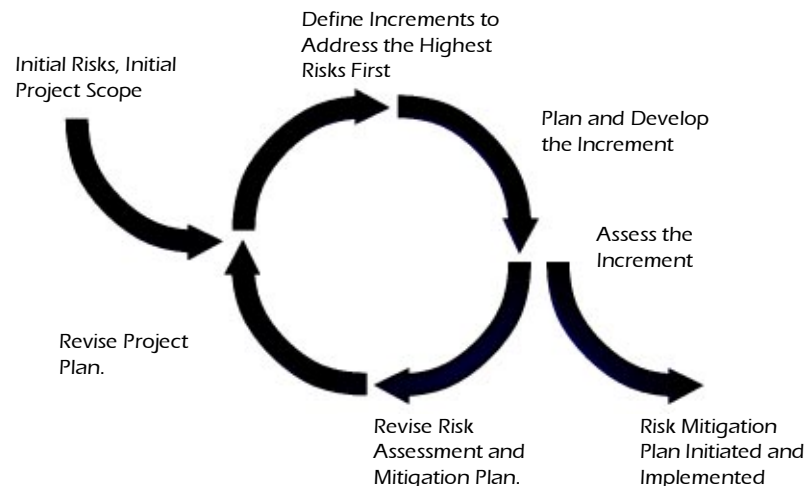
Our Approach: Success Through Process

Our personnel have experience working in a variety of software development infrastructures including Rational's Unified Process (RUP), Microsoft's Solutions Framework (MSF), Synergy, and Ernst and Young's Navigator. Having proven that a well-structured development process is vital to the success of any software project, we incorporate the best features of the above methodologies into our approach to mission-critical software development.

One of the goals of Mobi-Sys' development strategy is the mitigation of risk. Using iterative, incremental approaches (see figure below), such as RUP, MSF, and Synergy, we have seen the following benefits:

- The client receives useful increments in a staged fashion that continually build toward the end product.
- Each increment delivers value-added benefits, while increasing confidence that the project can be flexible enough to adjust to continually evolving business needs.
- Each increment is relatively short in duration, so the possibility of the project's becoming a "Runaway Train" is lessened dramatically.
- Any problems with the design or the technology surface early, not 90% into the project timeline.
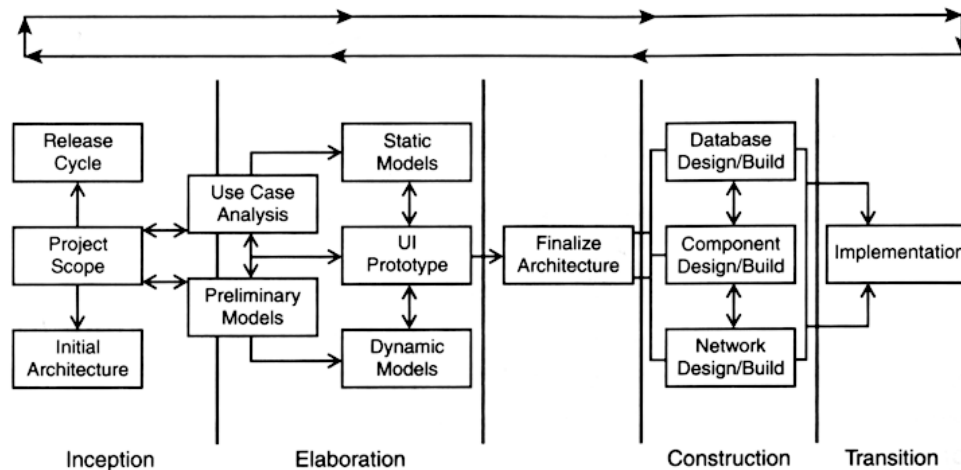- Users, analysts, designers, and developers stay very focused on each increment.

Iterative, Incremental Project Framework with Risk Mitigation

Initial Risks, Initial Project Scope

Define Increments to Address the Highest Risks First

Plan and Develop the Increment

Assess the Increment

Risk Mitigation Plan Initiated and Implemented

Revise Risk Assessment and Mitigation Plan.

Revise Project Plan.

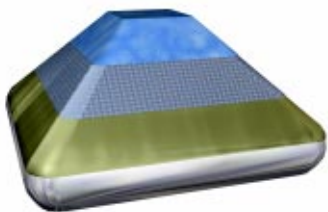Components of Successful Software Development

The Synergy Process Model

The process model we apply on small and medium size projects (approx 1 - 36 person months), is the Synergy Process

Unified Modeling Language (UML)

A common thread of all the current process models is the use of an effective mechanism for communicating between the client, developers, and end users. Mobi-Sys employs the use of UML in its system development.

- UML is the industry-standard language for specifying, visualizing, constructing, and documenting the artifacts of software systems.
- Using UML, programmers and application architects can make a blueprint of a project, which, in turn, makes the actual software development process easier.
- UML was adopted as a standard by the Object Management Group (www.omg.org) in November 1997.
- UML fuses the concepts of Booch, OMT, and OOSE modeling languages. The result is a single, common, and widely usable modeling language for users of these and other methods.

Component 4: The Creative Solution

Our Services: Software Development Solutions and Consulting

Mobi-Sys' Services range from business analysis and process consulting to complete custom application development. The team has been involved in the building of a wide variety of business and data transfer applications, and has extensive experience in the conversion of legacy systems to the Windows platforms and Internet technologies. We also have experience interfacing to existing systems to preserve the value of previous software project investments.

We have the talent you need to satisfy your business solution and software development requirements. From filling a single role on your existing team, to providing an entire Applications Development Team, Mobi-Sys has the skills to make your project a success.

Our Skills: The Required Elements of Successful Software Development

Our team has a strong background in the following areas

- Software Development Process Methodologies
- Project Management
- Business Analysis / Business Process Modelling
- Systems Analysis / Requirements Gathering / Specification Development
- Systems Architecture
- Software Engineering / Programming (Object Oriented / Component Centric / Web)
- Database Design / Administration
- Graphical User Interface Design
- Quality Assurance Practices
- Source Code Control
- Software Release, Deployment and Distribution Principles
- Evaluation / Hiring Principles
- Time / Budget / Project Tracking

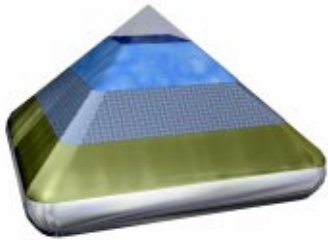## Our Business Applications Experience: Our Skills At Work

Mobi-Sys has experience developing custom, Mission-Critical business applications with emphasis on the following areas.

- Business To Business / Business To Customer / Supply Chain Management
- Communication / Data Transfer with existing applications
- Reporting / Data Mining
- Accounting
- Purchasing / Shipping / Receiving / Invoicing / Inventory / Billing
- Maintenance Management
- Scheduling and Resource Management
- Quality Control / Statistics
- Contact Management
- Machine Control / Integration and Communication through Serial Interfaces with PLCs, CNC Controllers, Handheld/Palmtop Computers, Swipe Card Readers, Bar Code Scanners

Our Industry Experience: Where We've Put Our Skills To Work

We have applied our skills to a number of different industries including Forestry, Automotive, Medical, Legal, and Hospitality.
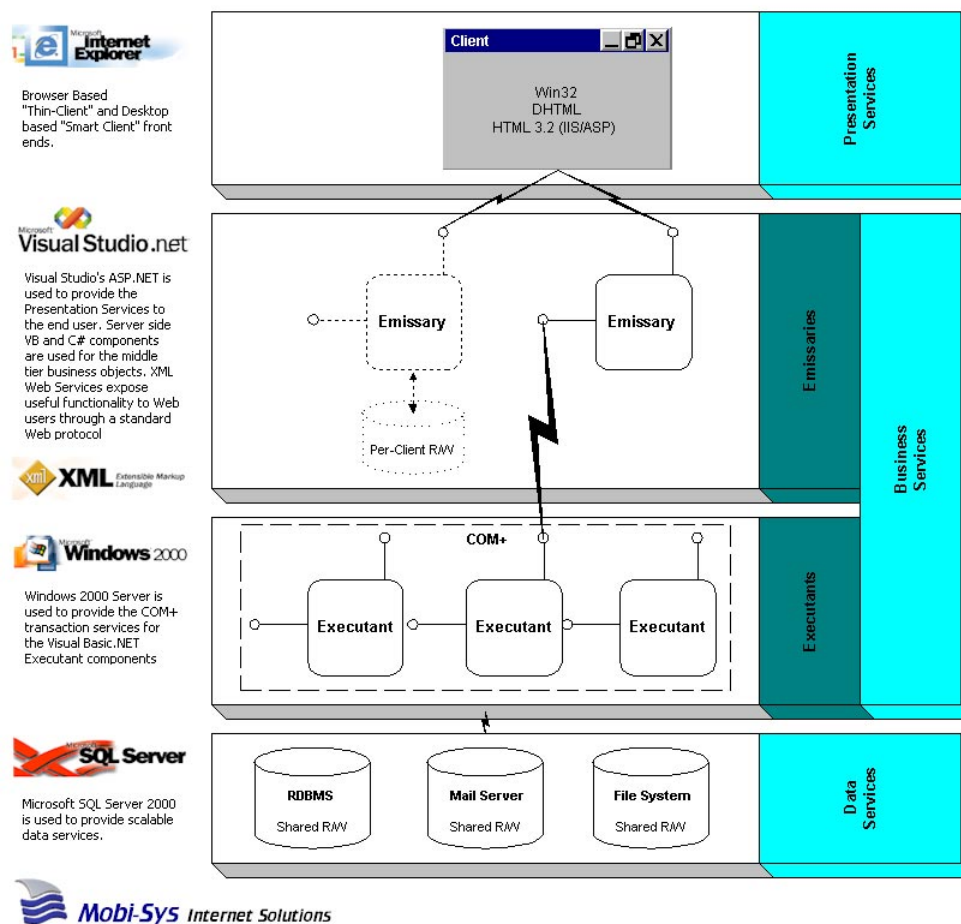
Component 5: The Appropriate Technology

Our Technical Expertise: The Windows Development Platform

Combining our attention to the business solution with the desire to deliver feature rich systems that can be efficiently developed, effectively maintained, and flexibly scaled to meet a rise or decline in system use or hardware availability, we aggressively follow new technologies to allow us to produce the best available implementation for our clients.

Development Architecture

Today's Technologies

Specializing in Microsoft technologies, we use tools such as Visual Studio.NET (Visual Basic.NET, C#.NET, Visual SourceSafe), Rational Rose, MS SQL Server, MS Internet Information Server, Macromedia Flash, TrueSpace, and technologies like the .NET Framework, COM+/MTS/COM/DCOM, HTML/ASP/ASP.NET, and XML/XSL to design and build attractive Internet, Desktop, and scalable distributed systems for the Windows platforms.

Our Advantage: Our Tools / Products / Design Patterns

Through past project work, we have recognized the importance of code reuse and the use of custom software tools to enhance our productivity in software development, beyond what is provided by commercially available products and development environments.

We have begun the retail release of our internally developed tools with the goal of providing a complete Productivity Tools Suite for the software development community.

VisualMake: VisualMake is a Visual Basic Project Maintenance and Build Utility that addresses the major difficulties in development and distribution of Enterprise Wide Active X Component-Centric projects. VisualMake has been on the market since June 1999 and is currently being distributed world wide through our reseller partners.

CodeRocker: CodeRocker is a Visual Basic Add-in that detects source code lacking error handling and in-line documentation and provides developers with the ability to automatically insert customized error handlers and procedure headers.

In addition to our retail products, we use our library of reusable software components, templates, and code generators for custom software development. These previously tested "building blocks" allow us to reduce completion time and consequently reduce budget.
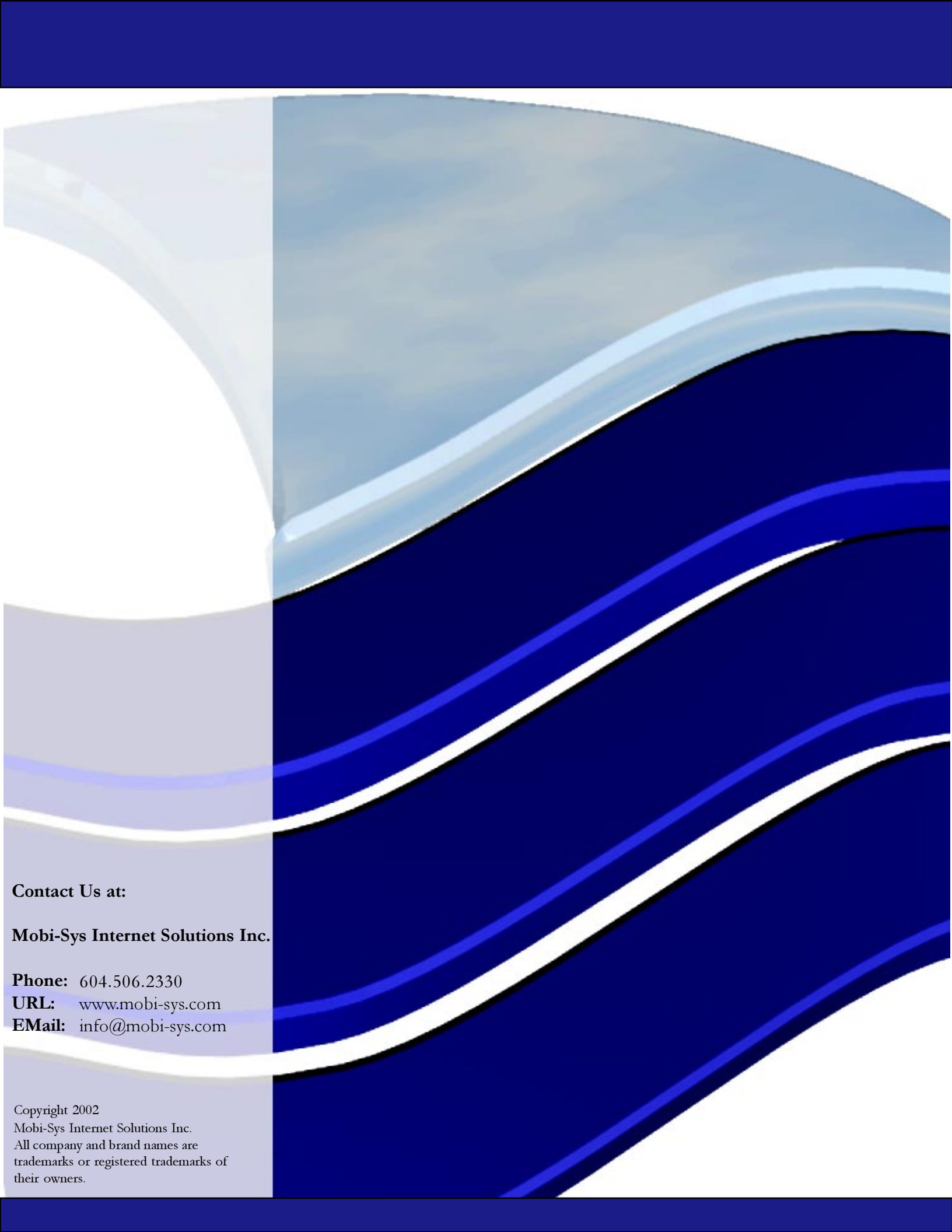

Component 6: (More than) The Sum Of Its Parts

In Conclusion: Bringing It All Together

Alone, each individual Component mentioned above does not ensure that a software initiative will be successful. Having strengths in all these areas is how we can consistently achieve deliberate success. We have dynamic, skilled, experienced people working within our proven development framework with tools that maximize productivity and maintainability. This allows us to offer cost effective services and maintain the balance between development speed and product quality. This is how we exceed our client's expectations.

For more information about our team, please contact us at **604.506.2330**, email us at **info@mobi-sys.com**, or visit us on-line at **www.mobi-sys.com**.

Contact Us at:

Mobi-Sys Internet Solutions Inc.

Phone: 604.506.2330
URL: www.mobi-sys.com
EMail: info@mobi-sys.com